

0113

**MEC**

Mangum  
Engineering  
Consultants

388 East Boynton Road • Kaysville, Utah 84037 • (801) 544-3641

1 December 1991

Dianne R. Nielson  
Director  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Dear Ms. Nielson,

Re: NOV #N91-20-1-1, Hindrance Violation, Co-Op Mining Company,  
Bear Canyon Mine, ACT/015/025, Emery County, Utah

Attached are copies of numerous letters sent to the Division concerning resolution of the Division Order issued 11/27/90. I have summarized the pertinent issues in the attached list.

Please consider this information in your evaluation of the referenced violation. Note that following each submittal the Division made a review and requested additional information be added. This is an iteration process and adequate time was not allowed. I appreciate your cooperation with this matter.

Thank you,



Kimly C. Mangum, P.E.  
Permitting & Compliance Consultant.

cc: Co-Op Mining Co.

**RECEIVED**

DEC 02 1991

DIVISION OF  
OIL GAS & MINING

*oil gas mine file  
12/1/91  
Braxton  
cc DKN*

<u>Date of Letter</u>	<u>Comments</u>
7 Nov 1990	Generation of new base maps had been discussed with the Division and new basic contour maps based on aerial photographs had been ordered. Note that this letter is dated prior to issuance of the NOV. The Division was told verbally by M.E.C. that it would take 6 to 8 months to complete the new maps and to update the related mine plan issues.
21 Jan 1991	New maps had not been received. An extension is requested for a min of 45 days following receipt of the maps from Olympus Aerial Surveys Inc.
21 Jan 1991	Submittal made. The complexities involved following generation of the new maps is stated. Division Order Items involving completion of maps are listed.
16 Feb 1991	Notice given of receipt of basic contour maps from Olympus Aerial Surveys Inc. Request for adequate time to complete and coordinate map information is made.
8 April 1991	Submittal made. Surface Facilities and Hydrology maps submitted for review.
20 April 1991	Submittal made. Water Monitoring and Watershed maps submitted for review.
23 April 1991	Submittal made. Division Order Items requiring additional time are listed. Extension to 7 Jun 1991 for final submittal is requested.
2 May 1991	Submittal made.
16 May 1991	Submittal made. Revisions to maps following Division review comments completed.
21 May 1991	Submittal made.
24 May 1991	Submittal made. All items listed in the Division Order are addressed.

Additional issues were brought up by the Division following the 24 May deadline. The impacts from the generation of new base maps encompassed all areas within the plan. It is an iteration process.

FILE COPY

Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

7 November 1990

Pamela:

Ref: Five-Year Permit Renewal, Follow-up Items, Bear Canyon Mine,  
Co-Op Mining Company, ACT/015/025, Emery County, Utah

Attached with this letter are 14 copies of the pages 3-40, 3-44, 3-46, 3-47, 3-59, 3-60, 3-68, 3E-2, 3E-3, 3G-3, 4-11, 4-15, 8-19, 8-21, 8-23, and 8-25. These pages include modifications to the text as noted by Henry Sauer after review of the 19 Oct 1990 submittal. Also attached with this correspondence are 10 additional copies of Plates 3-3 and 8-2 along with 14 copies of Plates 2-4 and 7-1.

I have been looking for the stipulations so I can proceed with those. The Areal photos for mapping should be completed within the next week. Base maps should then be available in 4 to 6 weeks and then we can proceed with the new maps and resolution of open matters.

Thank you,



Kimly C. Mangum, P.E.  
Permitting & Compliance Consultant.

Enclosure(s)  
cc: Co-Op Mining Co.

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DEC 02 1991

DIVISION OF  
OIL GAS & MINING

Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

**FILE COPY**

Pam,

21 January 1991

Ref: Request for Extension, NOV #90-34-1-1, Co-Op Mining Company,  
Bear Canyon Mine, ACT/015/025, Emery County, Utah

When it became apparent that improvements to the Permit maps would be useful, Co-Op contracted for aerial photographs to be taken and for contour maps to be generated. The requirements were coordinated with the Division, which was aware of and involved with the timeliness with which this work was initiated (Nov. 1990). The basic contour maps have not been completed nor delivered, as of yet to Co-Op, therefore, completion of the maps and related tasks has not occurred. Please extend the deadline for abatement to allow for proper completion. The Division will be notified when the contour maps are delivered. Maps will be submitted for review as soon as they are completed. It is expected to take a minimum of forty five days to accurately complete the abatement requirements after the contour maps are received.

When this issue first originated it was considered that it would take six to eight months to generate the new maps discussed. I was later informed that the Division issued the referenced violation concerning the "inaccuracy" of the existing approved maps and set the improbable deadline that approaches. If I can help clarify any of the issues involved, please contact me.

Thank you,



Kimmy C. Mangum, P.E.  
Permitting & Compliance Consultant.

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Lowell P. Braxton/Pamela Grubaugh-Littig  
Associate Director/Permit Supervisor  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

FILE COPY

21 January 1991

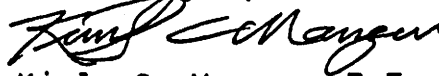
Ref: Division Order, Bear Canyon Mine, Co-Op Mining Company,  
ACT/015/025, Emery County, Utah

Attached with this letter are 4 copies of revised pages and Plates. These Plates and pages have been adjusted following suggestions from the Division Order comments, received 7 December 1990, (ltr dated Nov 27, 1990). Additional copies of this material will be forwarded to the Division upon request.

Many of the items address issues that involve the new maps that are being generated. As has been stated in a letter concerning the new maps and related NOV #90-34-1-1, these maps have not been completed. Closing related issues are contingent upon completion of these maps.

Completion of the new maps and related issues is expected to take over two months. New hydrology calculations must be completed, mass balance calculations have to be made, as well as on-site investigations to verify map information. Co-Op is actively pursuing completion of all issues. If a stipulated permit can be issued allowing adequate time for completion of open issues, it may prove to be expedient.

Thank you,



Kimly C. Mangum, P.E.  
Permitting & Compliance Consultant.

Enclosure(s)  
cc: Co-Op Mining Co.

PAGE 1

Items #1 & #2

p 2-2 thru  
2-5, 2B-20

Text has been updated to more clearly define the relationship between C.O.P. and Co-Op. A written statement of consent, from the coal lease assignee to mine coal, is added to Appendix 2-B.

Item #3

This issue involves completion of the new maps.

PAGE 2

Item #4

App. 8-C

A reconnaissance inspection was performed by the U.S. Department of Agriculture, Soil Conservation Service in Nov. 1990. The letter received from SCS did not address every section within the permit area as requested and SCS promised to send a new letter in Dec 1990. No response has been received. The investigation showed no Prime Farmlands within the area.

Item #5

App. 8-B

An Order 1, Soil Survey was conducted on the entire operational area, in Nov. 1990 by the U.S. Department of Agriculture, Soil Conservation Service. The copy of the report was not of good enough quality to reproduce. I requested a better copy in Dec 1990 and have been promised a new one. No response has been received.

Item #6

p 3-45

Text has been corrected on page 3-45. The referenced statement was not found on page 8-24 (10/90) or any others. If you are aware of any additional locations in the text, please advise and they will be corrected.

Item #7

p 8-23

Description of measures used to protect topsoil material from wind and water is found in Section 8.7. "Immediate seeding and mulching" was incorporated into submitted text, prior to receipt of the Division Order, (see Section 8.7.1.3, #4). Construction of a berm is now specifically identified in Section 8.7.1.3, #3.

Item #8

This issue involves completion of the new maps.

PAGE #3

Item #9

References calling for compaction of redistributed plant growth material, were removed from submitted text, prior to receipt of the Division Order (10/90).

Item #10

Plate 3-3 was submitted, showing 8 raptor nest locations, prior to receipt of the Division Order (10/90).

Item #11

p 4A-2

A new letter from the legal owner, C.O.P. Coal Development Company is included.

Item #12

Annual inspection is called for, as required in section 7.2.7.4, p 7-66, submitted prior to receipt of the Division Order (10/90).

Item #13

The issues concerning "non-coal waste", "spoil", "coal processing waste", "underground development waste", or "coal mine waste", were addressed and corrections made and submitted prior to receipt of the Division Order. See Sections 3.5.8, and 3.6.3.2, etc. (10/90).

PAGE #4

Item 14

This issue involves completion of the new maps.

Item 15

This issue involves completion of the new maps.

Item 16

Tables 7.1-8 shows monitoring for years 1990 and 1991 (p 7-41 3/90), and Table, 7.1-9 shows monitoring for years 1992 thru 1995 (p 7-42 3/90), as previously coordinated with the Division. If there are any specific discrepancies, please identify them for correction.

Item 17

This issue involves completion of the new maps.

PAGE #5

Item 18

This issue involves completion of the new maps.



**FILE COPY**

Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

16 February 1991

Pam,

Ref: Request for Extension, NOV #90-34-1-1, Co-Op Mining Company,  
Bear Canyon Mine, ACT/015/025, Emery County, Utah

The second of the two required contour maps was received from Olympus Aerial last week. The required information is being placed on the maps at this time. Please extend the deadline for abatement to allow for proper completion.

I understand from our recent conversation that you do not feel justified in extending the deadline more than to 25 February 1991. Although this does not agree with our discussions prior to the time DOGM issued the violation, every effort to meet this date will be made. Submittal of the maps will be scheduled for 25 february 1991 unless we are notified otherwise.

Thank you,



Kimly C. Mangum, P.E.  
Permitting & Compliance Consultant.

cc Co-Op Mining Co.

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**FILE COPY**

Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

8 April 1991

Pamela:

Ref: Revised Maps: Surface Facilities and Hydrology, Bear Canyon  
Mine, Co-Op Mining Company, ACT/015/025, Emery County, Utah

Attached with this letter are 4 copies of Plates 2-4A, 2-4B, 2-4C, 2-4D, 7-1A, 7-1B, 7-1C, and 7-1D. Modifications have been made to conform with the review made by the Division. Please review these maps and notify me of any areas that you feel have discrepancies.

Thank you,



Kimly C. Mangum, P.E.  
Permitting & Compliance Consultant.

Enclosure(s)  
cc: Co-Op Mining Co.



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**FILE COPY**

Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

20 April 1991

Pamela:

Ref: Revised Maps; Surface Facilities and Hydrology, Bear Canyon  
Mine, Co-Op Mining Company, ACT/015/025, Emery County, Utah

Attached with this letter are 4 copies of Plates 7-4 and 7-5. Modifications have been made to conform with the review made by the Division. Please review these maps and notify me of any areas that you feel have discrepancies. Additional copies will be forwarded to the division upon request.

Thank you,

Kimly C. Mangum, P.E.  
Permitting & Compliance Consultant.

Enclosure(s)  
cc: Co-Op Mining Co.

**FILE COPY**

Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

23 April 1991

Ref: Division Order, Bear Canyon Mine, Co-Op Mining Company,  
ACT/015/025, Emery County, Utah

This letter is in response to your letter dated 11 April 1991, received 16 April 1991. Attached with this letter are 4 copies of revised pages. These pages have been adjusted following suggestions from the Division Order comments, received 7 December 1990, (ltr dated Nov 27, 1990). Additional copies of this material will be forwarded to the Division upon request.

Each of the items from the Division Order are addressed in the pages that follow. These comments and responses should satisfy any concerns that the Division may have. If a stipulated permit can be issued allowing adequate time for completion of active issues, please proceed in that manner. Be advised that additional full time personnel are actively working to close the open issues.

Thank you,



Kimly C. Mangum, P.E.  
Permitting & Compliance Consultant.

Enclosure(s)

cc: Co-Op Mining Co.  
C.O.P. Coal Development Co.

PAGE 1

Items #1 & #2                      CLOSED

Updated text submitted 21 January 1991. No follow up comments received.

Item #3                              CLOSED

Plates 2-4A thru 2-4D (Surface Facilities), 7-1A thru 7-1D (Hydrology), 7-4 (Water Monitoring) and 7-5 (Watershed) were submitted to the Division on 26 Feb 1991 by Dan Guy for Co-Op. The maps were subsequently reviewed by the Division and review comments were received 21 March 1991. Plates 2-4A thru 2-4D and 7-1A thru 7-1D were updated and resubmitted 8 April 1991. Plates 7-4 and 7-5 were resubmitted 22 April 1991.

PAGE 2

Item #4                              CLOSED

Results of the reconnaissance inspection, performed by the U.S. Department of Agriculture, Soil Conservation Service in Nov. 1990 was incorporated into the MRP and submitted 13 February 1991.

Item #5                              ATTACHED

pg 8-ii, 8-1 thru 8-11  
8B-13 thru 8B-29      Results of the Order 1, Soil Survey conducted on the entire operational area, in Nov. 1990 by the U.S. Department of Agriculture, Soil Conservation Service is now incorporated into the text and added to Appendix 8-B. Coordination with the SCS to obtain a quality reproduction of their survey information for the new soils map was just recently concluded by Dan Guy and Plate 8-1 is expected to be available for delivery to the Division within the next week.

Item #6                              CLOSED

Updated text submitted 21 January 1991. No follow up comments received.

Item #7 CLOSED

Updated text submitted 21 January 1991. No follow up comments received.

Item #8 ACTIVE

Co-Op is in the process of generating a new Map that will better indicate soil requirements for topsoil redistribution. Co-Op has requested a written position from the Division concerning the use of substitute topsoil material as previously approved in the plan and has not as of yet received a response. Review of the newly generated maps indicates that the acreage was under estimated in earlier editions of the MRP. The operator intends on generating any additional required material from beneath the existing topsoil pile and from a new site proposed south east of the scale house. Concern as to the availability of sufficient topsoil material is not in question. Please allow for an additional 30 days (24 May 1991) to complete this matter. Any potential impacts from the Divisions position on previously approved procedures should be forwarded to Co-Op as soon as possible.

PAGE #3

Item #9 CLOSED

Updated text submitted prior to receipt of Division Order (10/90). No follow up comments received.

Item #10 CLOSED

Updated Plate 3-3 submitted prior to receipt of Division Order (10/90). No follow up comments received.

Item #11 CLOSED

Updated text submitted 21 January 1991. No follow up comments received.

Item #12 CLOSED

Updated text submitted prior to receipt of Division Order (10/90). No follow up comments received.

Item #13

CLOSED

Updated text submitted prior to receipt of Division Order (10/90).  
No follow up comments received.

PAGE #4

Item 14

ACTIVE

Co-Op is in the process of generating a new Post Mining Topography (Plate 3-2) and Post Mining Drainage (Plate 7-7) Map. This is perhaps the largest of the tasks incorporated into the updating of materials required by the Division Order and is contingent on completion of all other issues. Please allow for an additional 45 days (7 June 1991) to complete the engineering required for this issue.

Item 15

ATTACHED

App 7-J Results of the Hydrogeologic Evaluation of the Bear Canyon Mine Expansion and Proposed Expansion Areas is included as Appendix 7-J to replace the old text.

Item 16

CLOSED

Updated text submitted 21 January 1991. No follow up comments received.

Item 17

ACTIVE

A few new issues concerning hydrology within the permit area were brought out with the new maps. See NOV No. N91-26-4-3. The operator is conducting new hydrologic calculations for the operation. Submittal for 30 May 1991 should be realized.

PAGE #5

Item 18

ACTIVE

See comments Item #17 and Item #14.

388 East Boynton Road • Kaysville, Utah 84037 • (801) 544-3641

Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

**FILE COPY**

2 May 1991

Pamela:

Ref: Updated MRP Maps and Plates, Bear Canyon Mine, Co-Op Mining Company, ACT/015/025, Emery County, Utah

Attached with this letter are 4 copies of the following Plates;

Plate 6-1, GEOLOGY MAP - Geologic Units have been added to the map as requested in the Forest Service Comments on the Federal Lease Tract.

Plate 7-10A (Formally 7-1A), 1990 Mine Water Survey, Bear Canyon No. 1 Mine - In-mine water lines and flow meters have been added as requested in Division Letter Dated 9 April 1991.

Plate 8-1, Soils Map - Results of the Order 1, Soil Survey conducted by SCS, have been incorporated in this new version of Plate 8-1. This action is in response to Item #5 of the Division Order.

Also attached to this letter is a summary showing the water usage at the Mine during 1990. Additional copies of the plates will be forwarded to the Division upon request.

Thank you,



Kimly C. Mangum, P.E.  
Permitting & Compliance Consultant.

Enclosure(s)  
cc: Co-Op Mining Co.



Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

16 May 1991

Pamela:

Ref: Revised Maps; Hydrology, Bear Canyon Mine, Co-Op Mining  
Company, ACT/015/025, Emery County, Utah

Attached with this letter are 4 copies of Plates 7-4, 7-5 and 7-6. We have made modifications as requested to improve readability. We have placed a north arrow on Plate 7-4 along with thickening the coal outcrop line so it stands out better. All water rights on record with the Utah Division of Water Rights, in the permit and surrounding area are found on Plate 7-6. If you feel that there is a problem with this please notify us and we can duplicate the information on Plate 7-4. EarthFax Engineering has reviewed the drainage areas shown on Plate 7-5, we have replotted it with the recommended changes. The reproduction quality of this new plot should be apparent.

Thank you,



Kimly C. Mangum, P.E.  
Permitting & Compliance Consultant.

Enclosure(s)  
cc: Co-Op Mining Co.

388 East Boynton Road • Kaysville, Utah 84037 • (801) 544-3641

Pamela Grubaugh-Littig  
Permit Supervisor/  
Henry Sauer  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

**FILE COPY**

21 May 1991

Ref: Division Order, Bear Canyon Mine, Co-Op Mining Company,  
ACT/015/025, Emery County, Utah

Please review the attached copy of pages from Chapter 8 that have been updated to incorporate changes that define reclamation procedures concerned with substitute plant growth material. Due to the large percentage of pre-1977 disturbance area, there is a deficiency of stored recovered material. There is however sufficient material available that has been identified in the event that the on-site (in-place) material is not suitable.

An on-site visit has tentatively been set up for 17 June 1991 to work the verification procedure. This submittal is for preliminary review, if you can notify me of any concerns prior to Friday 24 May 1991, I will be able to address them for the official submittal.

Thank you,



Kimly C. Mangum, P.E.  
Permitting & Compliance Consultant.

Enclosure(s)

# MEC

Mangum  
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Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

24 May 1991

Ref: Division Order, Bear Canyon Mine, Co-Op Mining Company,  
ACT/015/025, Emery County, Utah

Attached with this letter are 4 copies of revised pages and Plates. These pages have been adjusted following suggestions from the Division Order comments, received 7 December 1990, (ltr dated Nov 27, 1990). Additional issues have been addressed with this submittal so that the permit complies with the standards and requirements of the State Program. Additional copies of this material will be forwarded to the Division upon request.

Each of the items from the Division Order and others that are addressed with this submittal are listed in the pages that follow. These comments and responses should satisfy any concerns that the Division may have.

Thank you,



Kimly C. Mangum, P.E.  
Permitting & Compliance Consultant.

Enclosure(s)

cc: Co-Op Mining Co.  
C.O.P. Coal Development Co.

PAGE 2

Item #8

ATTACHED

Plates 8-5A  
thru 8-5D,

This "Reclamation Area" map divides the disturbed area into 8 different sub areas. Each area is discussed in the text.

p 8-ii, 8-iii  
8-11 - 8-41,  
8A-1 - 8A-2,  
8D-1

T.O.C., and text have been modified to incorporate changes that define reclamation procedures concerned with substitute plant growth material. Due to the large percentage of pre-1977 disturbance area, there is a deficiency of stored recovered material. There is however sufficient material available that has been identified in the event that the on-site (in-place) material is not suitable. Some reorganization and renumbering of Chapter 8 has been completed.

p 3-47, 3-61,  
3-76, 4-10,  
9-13, 9-16

References to Chapter 8 were updated.

PAGE #4

Item 14

Attached

Plates 3-2  
p 3-vi, 3-66,  
3-72 and  
App 3-L

Post Mining contours have been generated using hydrologic requirements and mass balance calculations. Calculations and profiles are found in App 3-L and are referenced in the other pages listed.

Item 17

App 7-F  
Plate 7-2  
Plate 7-3

Calculations have been performed to verify that the proposed sedimentation pond geometries will fully contain the 10-year, 24-hour precipitation event with maximum sediment storage and adequate decant facilities. Topographic maps of the ponds with a scale of 1"=20' are included.

PAGE #5

Item 18

App 7-H  
Plate 7-7  
Ch 7

Reclamation channel designs have been completed and include accurate post mining watershed definitions, cross sections, profiles, and design calculations. Results have been incorporated into the main text of Chapter 7.

ADDITIONAL ISSUES

App 7-K  
Plate 7-1C

Reference to the lower pile of downcast material below the upper storage pad was added to the text. Also the strip of disturbed area below the portal access road near the Hiawatha portal was added as a B.T.C.A area.

p 7-v

List of Plates updated.

p 3-10

Number of disturbed acres corrected.

Ch 7  
p 58-125  
App 7-G  
Plates 7-1

The text has been modified to include the reference to the revised appendixes. See item 17 and 18 above. In addition, hydrologic calculations have been performed to determine the adequacy of all existing diversion structures (ditches and culverts) and rip-rap sizes. Watershed areas within the disturbed area are shown on Plates 7-1.

Plates 2-4,

Plates have been updated to coordinate with all of the updates made.